

00C# 96

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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(541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: **M106060**

CLIENT: BRISTOL		INVOICE TO: BRISTOL		TURNAROUND REQUEST in Business Days* <div style="display: flex; justify-content: space-around; font-size: small;"> <div>Organic & Inorganic Analyses</div> <div>Petroleum Hydrocarbon Analyses</div> </div> <div style="display: flex; justify-content: space-around; font-size: x-small;"> <div> 10 7 5 4 3 2 1 <1 </div> <div> 5 4 3 2 1 <1 </div> </div> <div style="display: flex; justify-content: space-between; font-size: x-small;"> <div>STD.</div> <div>STD.</div> </div> <div style="text-align: center; font-size: x-small;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">OTHER</div> <div>Please Specify _____</div> </div> <div style="font-size: x-small; margin-top: 5px;">*Turnaround Requests less than standard may incur Rush Charges.</div>																											
REPORT TO: ANNE KRANAWETTER		P.O. NUMBER:																													
ADDRESS: AMCHITKA ISLAND, AK																															
PHONE: 907-770-0974 FAX: 770-0975		PROJECT NAME: AMCHITKA		<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <th colspan="12">REQUESTED ANALYSES</th> </tr> <tr> <td style="width: 20px;">DRO</td> <td style="width: 20px;">BTEX</td> <td style="width: 20px;">w/ Nap</td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> </table>				REQUESTED ANALYSES												DRO	BTEX	w/ Nap									
REQUESTED ANALYSES																															
DRO	BTEX	w/ Nap																													
PROJECT NUMBER: 21090		SAMPLED BY:																													
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME											MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID																
1. OIAMATH SL-B	6/19/01 1640	✓	✓									S	1																		
2. OIAMATH SSL	6/19/01 1645	✓	✓									S	1																		
3. OIAMATH SL	6/19/01 1650	✓	✓									S	1																		
4. OIAMATH SL	6/19/01 1655		✓									S	1																		
5. Ac 11/01/01																															
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12.																															
13.																															
14.																															
15.																															

RELINQUISHED BY: Charlie Marshall	FIRM: BRISTOL	DATE: 6/19/01	TIME: 1919	RECEIVED BY: Chris Zindler	FIRM: NCA	DATE: 6/19/01	TIME: 1919
RELINQUISHED BY:	FIRM:	DATE:	TIME:	RECEIVED BY:	FIRM:	DATE:	TIME:

ADDITIONAL REMARKS:

TEMP: **6.2°C**

PAGE **11** OF **11**



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541.383.9310 fax 541.382.7588

6 December, 2001

Anne Kranawetter
Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 06/19/01 19:19. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson
Environmental Group Leader

Work Orders included in this report:

M106060



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Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
11/02/01 09:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMA1T14SL-B	M106060-01	Soil	06/19/01 16:40	06/19/01 19:19
01AMA1T15SL	M106060-02	Soil	06/19/01 16:45	06/19/01 19:19
01AMA1T16SL	M106060-03	Soil	06/19/01 16:50	06/19/01 19:19
01AMA1T17SL	M106060-04	Soil	06/19/01 16:55	06/19/01 19:19

C.O.C.# 96

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

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Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
11/02/01 09:22

Diesel Hydrocarbons (C10-C25) per AK102
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA1T14SL-B (M106060-01) Soil						Sampled: 06/19/01 Received: 06/19/01			
Diesel Range Organics	5610	150	mg/kg dry	1	AK 102	06/20/01	06/20/01	0106069	
<i>Surr: 1-Chlorooctadecane</i>	102 %	50-150							
<i>Surr: Triacontane</i>	101 %	50-150							
01AMA1T15SL (M106060-02) Soil						Sampled: 06/19/01 Received: 06/19/01			
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/20/01	06/20/01	0106069	
<i>Surr: 1-Chlorooctadecane</i>	88.9 %	50-150							
<i>Surr: Triacontane</i>	134 %	50-150							
01AMA1T16SL (M106060-03) Soil						Sampled: 06/19/01 Received: 06/19/01			
Diesel Range Organics	1510	150	mg/kg dry	1	AK 102	06/20/01	06/20/01	0106069	
<i>Surr: 1-Chlorooctadecane</i>	97.5 %	50-150							
<i>Surr: Triacontane</i>	94.9 %	50-150							

North Creek Analytical - Mobile Lab

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
11/02/01 09:22

BTEX, MTBE and Naphthalene per EPA Method 8021B

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA1T14SL-B (M106060-01) Soil					Sampled: 06/19/01 Received: 06/19/01				
Benzene	ND	0.0647	mg/kg dry	50	1B BTEX/MTI	06/19/01	06/20/01	0106066	
Toluene	ND	0.259	"	"	"	"	"	"	
Ethylbenzene	ND	0.259	"	"	"	"	"	"	
Xylenes (total)	ND	0.517	"	"	"	"	"	"	
Naphthalene	ND	2.59	"	"	"	"	"	"	A-01
Surr: 4-BFB	76.8 %	50-150							
01AMA1T15SL (M106060-02) Soil					Sampled: 06/19/01 Received: 06/19/01				
Benzene	ND	0.0857	mg/kg dry	50	1B BTEX/MTI	06/19/01	06/20/01	0106066	
Toluene	ND	0.343	"	"	"	"	"	"	
Ethylbenzene	ND	0.343	"	"	"	"	"	"	
Xylenes (total)	ND	0.686	"	"	"	"	"	"	
Naphthalene	ND	3.43	"	"	"	"	"	"	A-01
Surr: 4-BFB	56.8 %	50-150							
01AMA1T16SL (M106060-03) Soil					Sampled: 06/19/01 Received: 06/19/01				
Benzene	ND	0.0725	mg/kg dry	50	1B BTEX/MTI	06/19/01	06/20/01	0106066	
Toluene	ND	0.290	"	"	"	"	"	"	
Ethylbenzene	ND	0.290	"	"	"	"	"	"	
Xylenes (total)	ND	0.580	"	"	"	"	"	"	
Naphthalene	ND	2.90	"	"	"	"	"	"	A-01
Surr: 4-BFB	59.9 %	50-150							
01AMA1T17SL (M106060-04) Soil					Sampled: 06/19/01 Received: 06/19/01				
Benzene	ND	0.133	mg/kg dry	50	1B BTEX/MTI	06/19/01	06/20/01	0106066	
Toluene	ND	0.532	"	"	"	"	"	"	
Ethylbenzene	ND	0.532	"	"	"	"	"	"	
Xylenes (total)	ND	1.06	"	"	"	"	"	"	
Naphthalene	ND	5.32	"	"	"	"	"	"	A-01
Surr: 4-BFB	89.5 %	50-150							

North Creek Analytical - Mobile Lab

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
11/02/01 09:22

Physical Parameters per APHA/ASTM/EPA Methods
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA1T14SL-B (M106060-01) Soil					Sampled: 06/19/01 Received: 06/19/01				
% Solids	71.8	0.0100 % by Weight		1	Gravimetric	06/20/01	06/21/01	0106070	
01AMA1T15SL (M106060-02) Soil					Sampled: 06/19/01 Received: 06/19/01				
% Solids	41.5	0.0100 % by Weight		1	Gravimetric	06/20/01	06/21/01	0106070	
01AMA1T16SL (M106060-03) Soil					Sampled: 06/19/01 Received: 06/19/01				
% Solids	38.8	0.0100 % by Weight		1	Gravimetric	06/20/01	06/21/01	0106070	
01AMA1T17SL (M106060-04) Soil					Sampled: 06/19/01 Received: 06/19/01				
% Solids	100	0.0100 % by Weight		1	Gravimetric	06/20/01	06/21/01	0106070	

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
11/02/01 09:22

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 0106069 - 3545 ASE

Blank (0106069-BLK1)

Prepared & Analyzed: 06/20/01

Diesel Range Organics	ND	150	mg/kg wet						
Surr: 1-Chlorooctadecane	23.8		"	23.4		102	50-150		
Surr: Triacontane	22.4		"	23.4		95.7	50-150		

LCS (0106069-BS1)

Prepared & Analyzed: 06/20/01

Diesel Range Organics	1460	150	mg/kg wet	1250		117	75-125		
Surr: 1-Chlorooctadecane	23.6		"	23.4		101	50-150		
Surr: Triacontane	31.8		"	23.4		136	50-150		

LCS Dup (0106069-BSD1)

Prepared & Analyzed: 06/20/01

Diesel Range Organics	1430	150	mg/kg wet	1250		114	75-125	2.08	20
Surr: 1-Chlorooctadecane	28.2		"	23.4		121	50-150		
Surr: Triacontane	23.2		"	23.4		99.1	50-150		

Matrix Spike (0106069-MS1)

Source: M106060-01

Prepared & Analyzed: 06/20/01

Diesel Range Organics	5630	150	mg/kg dry	1720	5610	1.16	60-140		Q-03
Surr: 1-Chlorooctadecane	26.7		"	32.2		82.9	50-150		
Surr: Triacontane	41.8		"	32.2		130	50-150		

North Creek Analytical - Mobile Lab

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Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
11/02/01 09:22

BTEX, MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 0106066 - MeOH Extraction

Blank (0106066-BLK1)

Prepared & Analyzed: 06/19/01

Benzene	ND	0.0250	mg/kg wet
Toluene	ND	0.100	"
Ethylbenzene	ND	0.100	"
Xylenes (total)	ND	0.200	"
Naphthalene	ND	1.00	"

Surr: 4-BFB 2.23 " 2.50 89.2 50-150

LCS (0106066-BS1)

Prepared & Analyzed: 06/19/01

Benzene	1.95	0.0250	mg/kg wet	2.50	78.0	69-138
Toluene	1.99	0.100	"	2.50	79.6	53-151
Ethylbenzene	2.22	0.100	"	2.50	88.8	61-141
Xylenes (total)	6.26	0.200	"	7.50	83.5	62-141
Naphthalene	2.82	1.00	"	2.50	113	65-135

Surr: 4-BFB 2.32 " 2.50 92.8 50-150

North Creek Analytical - Mobile Lab

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Project: Amchitka
Project Number: 21090
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Reported:
11/02/01 09:22

Notes and Definitions

- A-01 Acceptance criteria for CCV was exceeded high for naphthalene. Sample result was non-detect and was not affected. DoD QSM Draft 5.9.4.2.E.1
- Q-03 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte already present in the sample.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
- wet Sample results reported on a wet weight basis (as received)
- RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

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Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M106060 FINAL 11 02 01 0922.mdb
			Default Report (not modified)
0106069-MS1	AK102 (DRO)	Diesel Range Organics	Q-03
0106069-MS1	AK102 (DRO)	Diesel Range Organics	Exceeds lower control limit
M106060-01	8021B BTEX/MTBE/N	Naphthalene	A-01
M106060-02	8021B BTEX/MTBE/N	Naphthalene	A-01
M106060-03	8021B BTEX/MTBE/N	Naphthalene	A-01
M106060-04	8021B BTEX/MTBE/N	Naphthalene	A-01